## PATENT APPLICATION

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Junichi KOKUDO

Appln. No.: 09/680,258

Confirmation No.: 8838

Filed: October 5, 2000

For: AUTHENTICATION METHOD AND

APPARATUS AT WIRELESS LAN SYSTEM

Docket No.: Q61120

Group Art Unit: 2662

Examiner: Michael I. MECEWED

MAR 0 9 2004

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Technology Center 2600

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

INFORMATION DISCLOSURE STATEMENT

UNDER 37 C.F.R. §§ 1.97 and 1.98

One copy of each of the listed documents is submitted herewith.

- 1. Japanese Unexamined Patent Publication No. 11-252183, dated September 17, 1999.
- 2. 5 GHz Band Ethernet Type Wireless LAN System, NTT R&D, Vol. 48, pp. 15-21, dated August 10, 1999.
  - 3. Japanese Unexamined Patent Publication No. 11-265349, dated September 28, 1999.

The present Information Disclosure Statement is being filed after the later of three months from the application's filing date and the mailing date of the first Office Action on the

INFORMATION DISCLOSURE STATEMENT

U.S. Appln. No.: 09/680,258

Atty. Docket No.: Q61120

merits, but before a Final Office Action, Notice of Allowance, or an action that otherwise closes

prosecution in the application (whichever is earlier), and therefore Applicant is filing

concurrently herewith a Statement Under 37 C.F.R. § 1.97(e). No fee under 37 C.F.R. § 1.17(p)

is required.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for

foreign language documents, Applicant encloses herewith a copy of a Communication from the

Japanese Patent Office dated December 16, 2003 with an English translation of the pertinent

portions thereof which cites such documents and indicates the degree of relevance found by the

Japanese Patent Office.

The submission of the listed documents is not intended as an admission that any such

document constitutes prior art against the claims of the present application. Applicant does not

waive any right to take any action that would be appropriate to antedate or otherwise remove any

listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted/

Howard L. Bernstein

Registration No. 25,665

SUGHRUE MION, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: March 9, 2004

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Docket No.: Q61120

Junichi KOKUDO

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Examiner: Michael I. McLOUGHLIN

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STATEMENT UNDER 37 C.F.R. § 1.97(e)

**Technology Center 2600** 

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The undersigned hereby states, upon information and belief:

That each item of information contained in the Information Disclosure Statement filed concurrently herewith was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of said Information Disclosure Statement.

Respectfully submitted,

Registration No. 25,665

SUGHRUE MION, PLLC Telephone: (202) 293-7060 Facsimile: (202) 293-7860

washington office 23373
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Date: March 9, 2004

#### Q61120

- Claims 1, 7, 10
- Cited Literature 1, 2
- Remarks

Cited Literature 1 states that authentication requests issued by an end system to the home network's registration server are forwarded by a foreign agent using Radius protocol, the home network checks the MAC address of the end system to verify its identity, and an ISP or intranet PPP server uses a challenge authentication protocol or the like to authenticate the end system (paragraphs 88 through 99 and 215).

To compare the invention relating to claim 1 to the invention described in Cited Literature 1, the two differ in two points – (a) the point that, in the invention relating to claim 1, an "AP" performs encrypted authentication, while in the invention described in Cited Literature 1, a "PPP server" carries out a challenge authentication protocol, and (b) the point that, in the invention relating to claim 1, an "AP" performs protocol conversion, while in the invention described in Cited Literature 1, a "foreign agent" uses Radius protocol – and correspond otherwise.

The aforementioned points of difference will be examined.

## Regarding (a)

Since having a base station, i.e. an AP perform encrypted authentication with a terminal station does not go beyond what had been practiced prior to the filing of the present application, as described in Cited Literature 2 (p. 20–21, 4.2 Public key authentication schemes), it is not found that having an AP perform authentication instead of having a PPP server perform authentication would involve any difficulty. Regarding (b)

What device is to perform protocol conversion is no more than a design feature that can be suitably determined by a person skilled in the art, so an arrangement whereby an AP performs protocol conversion cannot be considered a remarkable difference.

Therefore, the invention relating to claim 1 could have been easily conceived of by a person skilled in the art based on the inventions described in Cited Literature 1 and 2. The same holds for claims 7 and 10.

- Claims 2, 8
- Cited Literature 1, 2
- Remarks

Cited Literature 2 states that after authentication using a MAC address, the MAC address is stored in an LOC (p. 27, 3.2.2 Authentication), and what device to register with is a matter that can be suitably determined as required by a person skilled in the art, so nothing remarkable can be found in the constitution of the inventions relating to these claims.

- Claims 4, 11
- Cited Literature 1, 2, 3
- Remarks

Using common key encryption as the encryption does not go beyond the well-known, conventional art, and providing the key with a term of expiration is described in Cited Literature 3 (paragraphs 50 and 51).

### List of Cited Literature

- 1. Japanese Unexamined Patent Application Publication H11-252183
- 5 GHz band Ethernet type wireless LAN system. NTT R&D, Vol. 48, p. 15–21, 10 August 1999.
- 3. Japanese Unexamined Patent Application Publication H11-265349